

REMARKS

Claims 1-9 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejection in view of the remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Grewell et al. (U.S. Pat. No. 6,528,755) and in view of Kriege (U.S. Pat. No. 5,408,572). This rejection is respectfully traversed.

In response to Applicants' Reply filed November 8, 2005, the Examiner has indicated that the arguments set forth therein were not persuasive. The Examiner points to a single statement in Kriege to support the rejection: "[i]t is self-evident that the emission characteristic of a light-emitting unit according to the invention is essentially determined by its geometry, i.e., its dimensions and angles, as well as by the emission characteristic of the feeding lightguide and the geometrical arrangement of lightguide and light-emitting unit relatively to each other." (Col. 4, lines 47-54). However, Applicants submit that the Examiner is using this statement out of context to suggest embodiments that Kriege never taught nor suggested. Additionally, Applicants submit that the Examiner must consider the entirety of the Kriege reference, including the repeated and systematic descriptions relating to widening a light beam, not narrowing a light beam. In light of this, Applicants submit that Kriege, when viewed in its entirety pursuant to MPEP § 2141.02, teaches away from the present invention and, thus, any combination therewith is improper. The statement above from Kriege, quoted by the

Examiner, does nothing to teach the invention claimed by Applicants. In fact, the statement teaches nothing more than basic engineering principles without any specificity. The only teachings of Kriegel that provide any semblance of specificity are all directed to widening the light emission angle.

As set forth in MPEP § 2141.02, the Examiner must consider the volumes of disclosure in Kriegel that teach away from the invention as presently claimed. In numerous locations, as set forth in the November 8, 2005 Reply, Kriegel teaches the use of an optical taper that reduces the numerical aperture of a beam of light passing through the taper. This approach increases the physical width of the beam. This characteristic of the device of Kriegel is necessary because, as stated specifically throughout the reference, it is directed towards applications where it is important to physically expand the beam, such as in “a signal display device for the display of traffic signals” (Abstract, lines 2 – 3). In fact, Kriegel states repeated that “[w]hen installing the conventional signal systems on multiple-lane freeways as well as alongside the road, it is desirable for the emission angle to be wider than required for purely individual track signaling on freeways” (Col. 2, lines 1-5). As such, the invention disclosed by Kriegel “is distinguished in that a tapering extension section is provided for obtaining a wider emission angle with a uniform, high light intensity over the entire angular range at the light exit end” (Abstract, lines 11 – 16, emphasis added). Kriegel again states this at Column 2, lines 13 – 18: “It is an object of the invention to further develop a light-emitting unit... in such a way that an increase in the emission angle is obtained with a uniformly high light intensity over the entire angular range” (emphasis added). Finally, Kriegel specifically states that the prior art suffers from a “very narrow angular range of

“+/- 3 degrees” (Col. 5, lines 25 – 26), while the invention of Kriege distributes the light “over an angular range of +/- 6 degrees” (Col. 5, lines 32 – 33).

It is improper for the Examiner to wholly disregard the numerous specific teachings that teach-away from the present invention, yet assert a single statement, out of context, for a proposition completely opposite of what Kriege teaches. Considering such teaching-away disclosure, one of ordinary skill in the art would not combine Kriege with the other references cited by the Examiner.

As previously stated, Claims 1 and 5 each claim an “...optical device operable to converge light lobes exiting said light transmitting device to define a final beam width, said final beam width being narrower than a beam width exiting said light transmitting device.” Claims 8 and 9 each recite methods comprising “...passing said laser beam exiting said lightpipe through an optical horn such that said side light lobe is generally reflected toward said central light lobe...” This arrangement physically narrows the beam of light exiting the optical device, and does not affect the total numerical aperture of the light. Further, an optical horn can be placed at the end of a generally narrowing waveguide, such that the waveguide physically narrows the beam, and the horn angularly narrows the beam. As such, it is respectfully submitted that the prior art combination cited by the Examiner neither anticipates nor renders obvious the present invention.

In light of the arguments presented above, Applicants believe that independent Claims 1, 5, 8, and 9 are in condition for allowance. Further, Claims 2 – 4, 6, and 7 all depend from Claim 1 or Claim 5, and are therefore believed to be in condition for

allowance for the same reasons. Reconsideration and withdrawal of the present rejection is therefore respectfully requested.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Final Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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